

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application and for rescinding the election/restriction requirement between the apparatus and the method claims.

Disposition of Claims

Claims 1-20 are pending in this application. Claims 1 and 13 are independent. The remaining claims depend, directly or indirectly from claims 1 and 13.

Claim Amendments

Claim 14 is cancelled in this reply without prejudice or disclaimer. Claims 1-20 are amended in this reply to clarify the present invention recited. In particular, claims 1 and 13 have been amended to clarify and more thoroughly claim the invention recited. Specifically, claim 1 has been amended to clarify that the tool has two differing functional configurations. Claim 13 has been amended to more clearly recite rotating and/or reciprocating the tool to clean an inner surface of a polished bore receptacle on the liner with curved outer surfaces of cleaning elements thereon. Further, claims 2-12 and 14-20 were amended such that these dependent claims recite "the cleaning tool" or "the method." Additionally, claims 9, 13, 17, 18, and 19 were amended to replace the term "PBR" with the phrase "polished bore receptacle." No new matter has been added by way of these amendments, as support may be found in the originally filed claims.

Claim Objections

A. Claims 2-12 and 14-20 stand objected to because the Examiner asserts that claims 2-12 should start "the cleaning tool," and claims 14-20 should start "the method." Claims

2-12 and 14-20 have been amended in this reply to recite “the cleaning tool” and “the method,” respectively. Accordingly, withdrawal of this objection is respectfully requested.

B. Claim 9 stands objected to because the Examiner asserts that the phrase “Polished Bore Receptacle” should be in all lower case letters, and no acronyms given. Claim 9 has been amended in this reply to recite “polished bore receptacle” in lower case letters and to delete the acronyms given. Accordingly, withdrawal of this objection is respectfully requested.

C. Claim 12 stands objected to because claim 12 depends from claim 13. The Examiner asserts that a dependent claim cannot depend from a later claim. Additionally, the Examiner indicates that there is no antecedent basis for “the end” from claim 13. Claim 12 has been amended to clarify the present invention recited. In particular, claim 12 has been amended to depend from claim 11. Thus, antecedent basis for “the end” is now provided by claim 11. In view of this amendment, withdrawal of this objection is respectfully requested.

D. Claim 13, 17, 18, 19, and 20 stand objected to because the Examiner asserts the acronym “PBR” should be written out in full as “polished bore receptacle.” Applicant respectfully notes that claim 20 does not include a reference to PBR. Thus, Applicant respectfully requests withdrawal of the objection of claim 20. Claims 13, 17, 18, and 19 have been amended in this reply to replace the acronym “PBR” with the phrase “polished bore receptacle.” Accordingly, withdrawal of this objection is respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 14 and 17 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner asserts that claims 14 and 17

improperly claim both a device and a method of cleaning a liner top. Claim 14 has been cancelled in this reply. Thus, this rejection with respect to claim 14 is moot. Claim 17 has been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

As amended, claim 17 depends from independent claim 13. Claim 17 is directed to a method of cleaning a liner top, as described in claim 13, wherein the method further includes the step of selecting a curvature of the curved outer surfaces to be no greater than the curvature of the inner surface of the polished bore receptacle. As amended, claim 17 is clearly directed to a method and provides a further step in cleaning a liner top. Thus, Applicant believes claim 17 is definite and properly claims a method of cleaning a liner top. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

A. Claims 1-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,275,939 ("Baker"). Claims 1-12 have been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

Independent claim 1, as amended, recites a cleaning tool for use on a work string, the tool comprising a cylindrical body having an axial bore running there through, a plurality of eccentrically located cleaning elements mounted thereon, the cleaning elements having outer faces, the outer faces having a curvature, and, positioning means to move the cleaning elements in relation to the cylindrical body from a first position to a second position, wherein, in the first position, the outer faces of the cleaning elements define a cylindrical surface centralized to the

axial bore so that the elements are configured in the first position to provide a polishing action, and in the second position, the outer faces present leading edges configured to provide a scraping action.

Embodiments of the present invention advantageously provide a cleaning tool that can provide a dual function of cleaning both a polished bore receptacle and neighboring casing on the same trip into the wellbore, on the same trip as the liner and/or packer is set. (Specification, page 2, lines 30-33). Further, embodiments disclosed herein provide a cleaning tool that can effectively clean the inner bore of a polished rod receptacle without damaging its relatively delicate inner surface while being able to effectively scrape the harder wearing inner surface of the neighboring casing to effectively clean the casing as well. (Specification, page 3, lines 8-14).

Baker relates to a casing scraper that performs one function. In particular, Baker discloses a casing scraper device designed to remove the cement or other coating from the inner wall of a string of casing. (Baker, Column 1, lines 19-22). Thus, the simple function of the tool is to spring bias a cutting edge towards a casing to clean the same. Baker, however, fails to teach or suggest control of the positioning of the blades (cleaning elements) to move same from a first position to a second position, wherein the positions provide a configuration that delivers either a polishing action or a scraping action, as required by amended independent claim 1. Additionally, Baker is completely silent with respect to a polishing action.

Furthermore, Baker provides scrapers upon which the only apparent curved surface is concave surface 33 that lies radially inwards from the cutting edge 18. As shown in Baker, surface 33 can never contact an external surface of, for example, a casing. Thus, Baker's

scraping tool is incapable of performing a polishing functionality. Further, the concave surface 33 of baker is not a surface centralized to the axial bore, as required by amended claim 1.

Applicant respectfully notes that in order for a claim to be anticipated, "every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). In view of the above, Baker fails to teach or suggest all the limitations recited in amended claim 1, as required to support a rejection under §102. Thus, claim 1 is patentable over Baker. Dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of the rejection is respectfully requested.

B. Claims 13, 15, 16, 19, and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by PCT Publication No. WO98/35131 ("Telfer"). Claims 13, 15, 16, 19, and 20 have been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

Independent claim 13, as amended, recites a method of cleaning a liner top, the method comprising the steps; (a) inserting a cleaning tool into a liner; (b) running the tool and liner together into a well bore; (c) setting the liner at a casing in the well bore; (d) rotating and/or reciprocating the tool to clean an inner surface of a polished bore receptacle on the liner with curved outer surfaces of cleaning elements thereon; (e) pulling the tool from the polished bore receptacle, so that the cleaning elements move outwardly to contact neighboring casing at the liner top; and (f) rotating and/or reciprocating the tool to clean an inner surface of the neighboring casing with the leading edges of the cleaning elements.

Telfer describes a cleaning tool. The cleaning tool is used in conjunction with a running tool to avoid a separate trip for a conventional casing scraper. The tool is used to run in liner to a selected point within the lower end of the casing, e.g., 500 feet above the lower end of the casing, where the liner is hung off and cemented. Telfer describes a tool that is used in the same trip as the liner hanging trip to scrape the casing and the top of the liner after hanging and cementing thereof. The cleaning tool operates on pull out after hanging and cementing the liner.

However, Telfer does not teach or disclose rotating and/or reciprocating the tool to clean an inner surface of a polished bore receptacle on the liner with cleaning elements thereon or pulling the tool from the polished bore receptacle, so that the cleaning elements move outwardly to contact neighboring casing at the liner top, as required by steps (d) and (e) of independent claim 13. Rather Telfer describes rotating and/or reciprocating the tool to clean an inner surface of the casing.

The tool disclosed by Telfer has scraping elements on the tool that *never enter* the polished bore receptacle because these are positioned above the junk bonnet 52, which in turn is locked to the polished bore receptacle 50. Thus the cited Telfer scraping elements cannot in any configuration be used to clean the polished bore receptacle and then clean the casing as intended in the claimed method.

As discussed above, in order for a claim to be anticipated, "every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown*, 265 F.3d at 1351. In view of the above, Telfer fails to teach or suggest all the limitations recited in amended claim 13, as required to support a rejection under §102. Thus, claim 13 is patentable over Telfer. Dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

A. Claims 14 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Telfer, and further in view of Baker. Claim 14 has been cancelled in this reply. Thus, this rejection with respect to claim 14 is moot. Claim 17 has been amended to depend from independent claim 13. Claim 13 has been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

As discussed above, independent claim 13 is patentable over Telfer. Baker fails to show or suggest that which Telfer lacks. Baker relates to a casing scraper that performs one function. In particular, Baker fails to show or suggest rotating and/or reciprocating the tool to clean an inner surface of a polished bore receptacle on the liner with cleaning elements thereon or pulling the tool from the polished bore receptacle, so that the cleaning elements move outwardly to contact neighboring casing at the liner top, as required by steps (d) and (e) of amended independent claim 13.

It is reiterated that neither Telfer nor Baker specifically describe inserting a cleaning tool into the polished bore receptacle to clean it, and neither suggests use of a tool having two differing functionalities, where two differing types of cleaning action are provided to prepare two differing surfaces for use, namely a fine polished bore receptacle, and a casing surface.

In view of the above, amended independent claim 13 is patentable over Telfer and Baker, whether considered separately or in combination. Dependent claim 17 is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

B. Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Telfer. Claim 18 depends from independent claim 13. Independent claim 13 has been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

As discussed above, amended independent claim 13 is patentable over Telfer. Specifically, Telfer does not teach or disclose rotating and/or reciprocating the tool to clean an inner surface of a polished bore receptacle on the liner with cleaning elements thereon or pulling the tool from the polished bore receptacle, so that the cleaning elements move outwardly to contact neighboring casing at the liner top, as required by steps (d) and (e) of independent claim 13. Rather Telfer describes rotating and/or reciprocating the tool to clean an inner surface of the casing only.

Point 13d of the Office Action suggests some confusion between cleaning of casing above the hung-off and cemented liner, which in the past required two tool trips, one to hang the liner and cement it within the lower extremity of the casing, and after pulling out the tools for setting and cementing the liner, running in a clean-up tool to remove cementitious deposits upon the casing above the liner – not the liner itself. Telfer fails to show or suggest the one-trip dual function capability provided by the tool of the present invention to clean both a polished bore receptacle and neighboring casing on the same trip into the wellbore.

The Examiner references the Abstract of Telfer for support that Telfer suggests running the tool back into the polished bore receptacle during the operation of a scraper. Applicant has reviewed the WIPO abstract of the reference and cannot find the teaching referred to by Examiner. The suggestion to adopt a non-rotating casing scraper refers to a cleaning action *upon the casing* made available on pull-out, that is, raising the tool string when

disconnected from the liner, and allowing the non-rotating scrapers to clean the *casing* above the liner.


In view of the above, Telfer fails to show or suggest the present invention as recited in amended independent claim 13. Thus, claim 13 is patentable over Telfer. Dependent claim 18 is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 17172/030001).

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Respectfully submitted,

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Attachments